# K-2: The student will demonstrate an understanding of the characteristics of organisms. (Life Science)

#### **Key Concepts:**

needs of organisms: air, water, food, shelter non-living offspring parent life cycle

# **Supporting Content Web Sites**

Habitats and Food Chains

http://www.woodlands-junior.kent.sch.uk/Homework/habitats.html

This site is for teachers; it contains definitions and examples of items that organisms need.

There are links to go to other sites.

K-2.1

What is an Organism?

http://www.megalink.net/~tlight/symbiosis/organism.html

This website gives about 9 different pictures that students can identify if the items are living or nonliving. Once the student clicks on the picture, it tells them if the item is living or non-living and why.

K-2.2

Illinois Agriculture Site

http://www.agr.state.il.us/kidspage/babies.html

This site has pictures of adult animals and when you click on the adult it takes you a picture of the baby and the name of what the child is called. It has about 7 examples but would be good for students to click on to study on their own.

K-2.3

Farm Babies

http://www.clover.okstate.edu/fourh/aitc/lessons/primary/farmbabe.pdf

This is a lesson plan for teaching about farm animals and their offspring. It is a PDF file and comes with a chart that has the male, female and baby name as well as some worksheets that can be printed off as an assessment.

K-2.3

Animal Diversity Web

http://animaldiversity.ummz.umich.edu/site/index.html

This site has various pictures, sounds and habitats that the teacher can use to help students determine the differences among various organisms such as birds, reptiles, mammals and amphibians.

## 3D Garden Composer

http://www.gardencomposer.com/dicomp-gallery.html

This site has various pictures of plants that students and teachers can click on to see differences.

The plants are put into categories which show major differences among organisms.

K-2.4

## Picadome Elementary School

http://www.picadome.fcps.net/lab/currl/lifecycles/default.htm

This site is maintained by a elementary school but has fabulous links to get you information about life cycles of various organisms such as ants, frogs and moths. There are many links that teachers and students can explore and the site uses pictures and information from reputable sources.

K-2.5

## Life Cycles of Animals

http://esd.iu5.org/LessonPlans/LifeCycle/animals.htm

This site has some good pictures of various animals through their life cycles. However, it has a lot of words that kindergarten students would not understand without assistance.

K-2.5

## The Life Cycle of Plants

http://www2.bgfl.org/bgfl2/custom/resources ftp/client ftp/ks2/science/plants pt2/

This site has information about the parts of a plant, seed dispersal and plant identification. This site also has some worksheets teachers can utilize to check for understanding.

K-2.5

## **Suggested Literature**

Roysten, Angela. (2003). Living and nonliving. Chicago: Heinemann Library.

ISBN: 1-40340-854-8

Lexile Level: Reading Level: 3.6

This book discusses the difference between living and nonliving things.

K-2.1

Whitehouse, Patricia. (2004). What can fly? Chicago: Heinemann Library.

ISBN: 1-40344-365-3

Lexile Level: Reading Level: 1.2

This picture book investigates living and nonliving things that can fly.

Hamsa, Bobbie. (1985). Animal babies. New York: Childrens Press.

ISBN: 0-516-02066-8 Lexile Level: 320 Reading Level: 2.0

This book provides a picture of the parent and baby animals while also providing appropriate

names for the young.

K-2.3

Darling, Kathy. (2002). Desert babies. New York: Walker Publishing.

ISBN: 0-8027-7533-0 Lexile Level: 880 Reading Level: 4.2

This book provides the reader with an identification of endangered species and their young.

K-2.3

Branigan, Carrie. (2006). All kinds of plants. Minnesota: Smart Apple Media.

ISBN: 1-58340-610-7

Lexile Level: Reading Level: 2.0

This book provides illustrations of plants, plant varieties, and physical characteristics.

K-2.4

Blackaby, Susan. (2005). Ann plants a garden. Minnesota: Picture Window Books.

ISBN: 1-40481-010-2

Lexile Level: Reading Level: 1.8

Ann plants a garden with a variety of plants that she harvests allowing students to observe plant

types. K-2.4

Hewitt, Sally. (1998). All kinds of animals. New York: Children's Press.

ISBN: 0-516-21175-7

Lexile Level: Reading Level: 3.2

This book examines various types of animals and their habitats.

K-2.4

Schubert, Ingrid. (1995). Amazing animals. Publishers Group West.

ISBN: 1-886910-05-7

Lexile Level: Reading Level: 3.5

This book focuses on a large number of animals, their habitats and life cycles.

K-2.4; K-2.5

Ross, Michael Elsohn. (2001). Life cycles. Millbrook Press.

ISBN: 0-7613-1817-8

Lexile Level: Reading Level: 3.2

This book examines the life cycles of both plants and animals.

K-2.5

Blackaby, Susan. (2003). Green and growing: A book about plants. Minnesota: Picture

Window Books.

ISBN: 1-40480-827-2

Lexile Level:

Reading Level: 3.0

This book describes the difference between plant types, illustrates the life cycles of plants and explains uses of plants.

K-2.4; K-2.5

## **Suggested Data Streaming Video**

#### **Desert Habitats**

ETV Streamline

This video segment discusses what plants and animals need to live in a desert.

What is a Habitat 0:00 - 0:36

K-2.1

## **Concepts in Nature: Where Animals Live**

ETV Streamline

This video explains the needs of animals in terms of shelter. The video shows animals that live in water, underground and above ground.

0:00 - 14:19

K-2.1

#### **Living and Nonliving Things**

ETV Streamline

This video has a section on characteristics of living and nonliving organisms. The video then takes the student through a practice of identifying living and nonliving things.

Living Things 6:27 – 11:28

Nonliving Things 11:28 – 13:23

Objects that Seem Like They're Living 13:23 – 14:05

K-2.2

#### Farm Animals: A First Look

ETV Streamline

This video extends from the history of organisms to the male and female names of the organisms. This video also shows and names the babies of the parents.

Entire Video – 0:00 -19:00

## **Animal Lifecycles**

**ETV Streamline** 

This video discusses the life cycles of organisms as well as how the babies and adults compare and contrast with one another.

Entire Video 0:00 – 14:00

K-2.3; K.-2.5

#### How We're Different and Alike

ETV Streamline

This video segment shows how humans vary in physical appearance. It also expresses likes and dislikes according to personal preferences.

Introducing Four Different People

Why Do Different People Like Different Things

Your Genes: Why You Look the Way You Do

How We Are Alike

0:00 - 8:51

K-2.4

## The Caterpillar and the Polliwog

ETV Streamline

This video shows the caterpillar and tadpole undergoing their respective life cycles.

Total Video 0:00 - 7:26

K-2.5

## **Plant Lifecycles**

ETV Streamline

This video shows the germination and pollination processes as well as the lifecycle of several plants.

Lifecycle of a Pumpkin 14:46 - 16:47

Lifecycle of a Apple Tree 16:47 – 18:39

## **Career Connections**

#### **Botanist**

A botanist studies a wide range of living organisms from the smallest plant like bacteria to the largest living things - the giant sequoia trees. Botanists know what plants need to survive and can identify various plant life cycles.

## **Ecologist**

An ecologist is a scientist who studies the interrelations of living things to one another and their environment. Ecologists study the life cycles of animals and plants, and the differences among organisms in the environment.

#### Veterinarian

A veterinarian is a doctor who is skilled in treating the diseases and practices proper care of animals. Some veterinarians are skilled in caring for large and small animals. Veterinarians must know about the life cycles of various animals and their offspring.